COE 4.5 Tiger Team Overview/Status

9 January 2002

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Tiger Team Objectives

- The COE Tiger Team (TT) was established to accelerate development and integration of COE 4.5 foundation components such that systems could start their formal integration, certification, operational test, and fielding processes in a timely manner
  - Same process that was use to "shape-up" both 2.X and 3.X baselines
- Success criteria:
  - Close all pri-1/2 GSPRs
  - Full 3.X functional equivalency
  - All new functionality properly working
  - All stability, reliability, and performance issues addressed

Leadership Matrix

SPAWAR
Systems Center San Diego

DISA
Rob Walker

Tiger Team Lead
Pat Garcia (TT Lead)
Maj. Myers,F. Schulz,T. McVittie(DISA Reps)
Maj. Logan & Maj. Theodoss (GCCS Reps)

Advisory Group
Andrew Cox (PD-15E)
Chuck Schwartz (PMW 157)
Ltc G. Matthias
Wayne Duke

Technical Group
Robert Fish
Rhonda Johnson
Randy South
John Weekley
Gary Holt (GCCS)
DISA Engineers (2)

Tiger Team Members

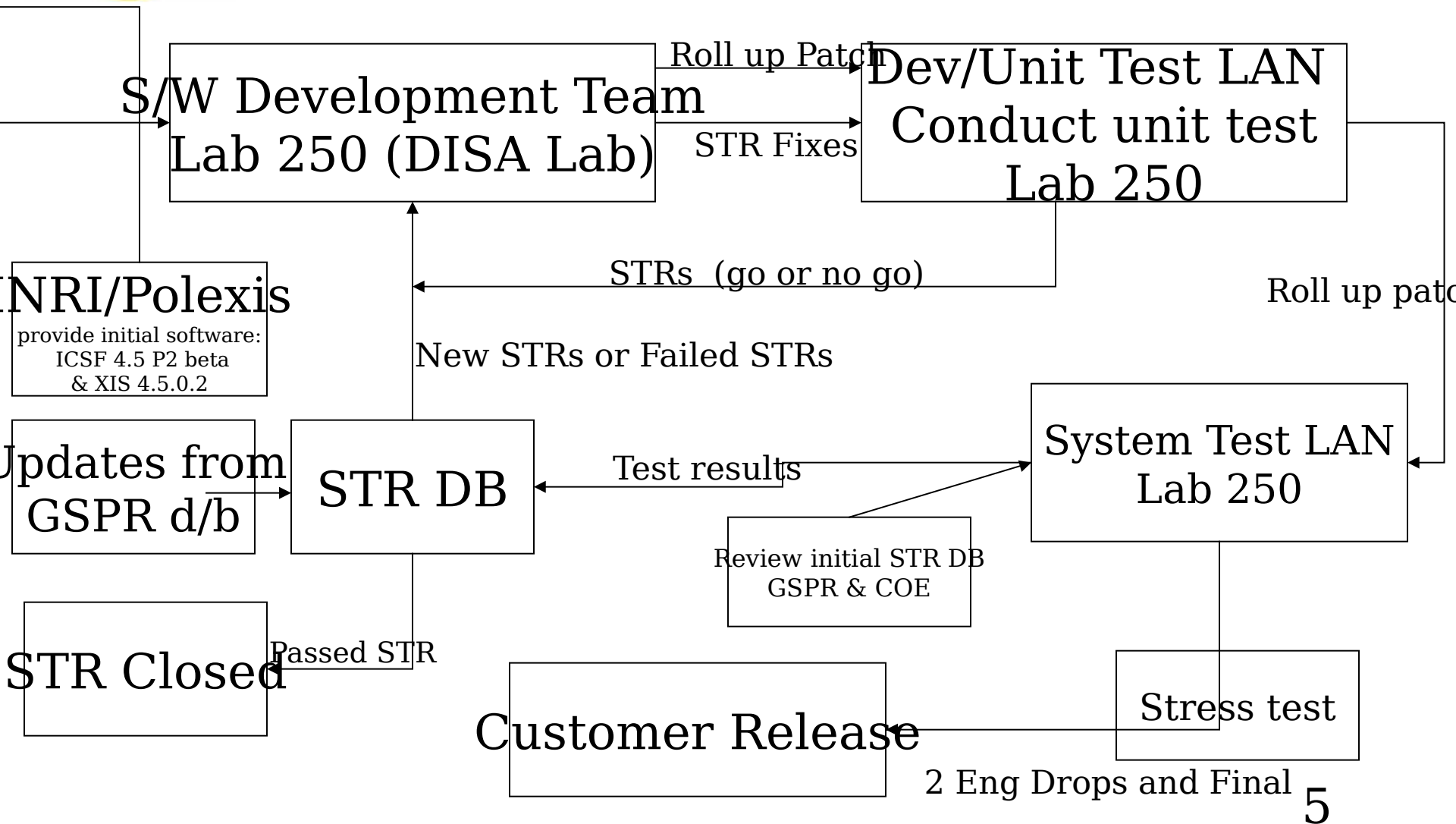|	
INRI	COE-M
JPL	DISA Test
Polexis	GCCS-M
	GCCS

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TT Software Baseline

- Solaris-8 and W2K are targeted baselines
  - HP and NT will be delivered after Tiger Team completion based on recompilation of above baselines
- Kernel Version: 4.2.0.0 P6 - Initial foundation; P7 after 1st TT Eng Drop; potential P8 after 2nd TT Eng Drop
- Integrated C4I System Framework (ICSF) Version: 4.5 P2 (beta)
- XIS/XISMI version 4.5.0.2 (beta)
- Infrastructure Services (e.g., OS Patches, Webbr, Java2, etc.)
- CCE/CME
- CNTP
- MTC & Link 11
- CST – March delivery
- Additional Mission Applications will be loaded during the TT. Purpose is to stress the foundation components.

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Build Process

S/W Development Team
Lab 250 (DISA Lab)

Roll up Patch

Dev/Unit Test LAN
Conduct unit test
Lab 250

STR Fixes

STRs (go or no go)

INRI/Polexis
provide initial software:
ICSF 4.5 P2 beta
& XIS 4.5.0.2

Roll up patch

New STRs or Failed STRs

Updates from
GSPR d/b

STR DB

Test results

System Test LAN
Lab 250

Review initial STR DB
GSPR & COE

STR Closed

Passed STR

Customer Release

Stress test

2 Eng Drops and Final

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Build Process (Cont.)

- Development Team will:
  - Provide initial software 3 Jan 02
  - Validate individual unit level fixes and then roll-up into weekly patches with ReadMe docs and an incremented version number

- Test Team will:
  - On the Dev/Unit Test LAN
    - Conduct unit test of new fixes (collaboratively with developer)
    - Test load patches prior to installation on "system LAN"
  - System Test LAN
    - Evaluate fixed STRs, conduct regression testing (coverage measured by test case functions)
    - Two test suites, plus 4.5P2 reference and 3.X mini-suites
    - Organize and direct a stress test prior to external TT release
    - Test specific requirements: multi-monitor/UTC support, Remote Install, Discretionary Access Control, merge host & other TBD requirements

Build Processes (Cont.)

- Participants:
  - DISA SSCSD, COE-M, plus on-site GCCS engineers and hardware to support TT
    - On-site key dev teams to work hand-in-hand with test engineers to isolate problem causes and to make fixes
- Customer Release – Occurs 3 times, posted on FTP server, full regression testing and performance / stress testing

Build Processes (Cont.)

- Mission Applications introduction
  - MTC, Tadil A/B, TBMD/TMSC (for system test only) with initial config
  - Intro of add'l common segments for test will occur as baseline matures
  - As mission apps added relevant services / agencies will be added (e.g., GCCS-M, TBMCS, etc.)
  - On-site "test & fix" with common segment developers will only occur after substantial stability/reliability seen in foundation

Tiger Team Configuration Management (CM) Process

- Tiger Team CM will be conducted outside the normal DISA CM process, like that of a development team
  - The COE-M STR database will be the CM tracking tool used by the TT
  - The CM will include all TT generated PRs will plus a base load of all open PRs from DISA, COE-M, and DISA SSC databases for the foundation components
    - Weekly GSPRs pulls to get problems found outside the TT
    - PCRB will continue to review new externally submitted GSPRs but forward to Tiger Team for action/resolution.
  - The TT Lead, working with COE Eng and GCCS reps, will determine the day-to-day work prioritization
  - No code changes to the TT software baseline will be authorized without first having a documented PR
  - GSPR submission/updating with DISA CMIS database
    - GSPR database will be updated twice-monthly with closed TT PRs
    - On conclusion of the TT, all outstanding OPEN SCRs will be exported to DISA GSPR database

Tiger Team Metrics

- Establish metrics to address each success criteria
  - No Pri-1/2 PRs
    - Pri –1/2 PR generation vs closure
    - All PR generation vs closure
  - Functionality equivalence/new functionality completion
    - Develop and use comparability matrix between 3.X/4.X function
  - Stability/Reliability
    - Reboots/lockups/forced logouts/etc per week (System LAN)
  - Performance
    - System resource metrics
      - CPU
      - Memory
    - User Interface response (vs 3.X)
    - System Throughput (vs 3.X)

Tiger Team Status Reporting

- Weekly Status reports
  - STR and Stability/Reliability metrics weekly
  - Performance and Functionality metrics every Stress Test event
  - Issues and/or lessons learned weekly
  - Out brief to the monthly COE IPR membership
- Status presented at PM/CE Flagship Meeting (20 Feb)
  - Stress Test 11-15 Feb
  - External TT Eng Drop-1 for applicable COE components *
- Status review to DISA ~29 Mar
  - Stress Test 18-22 Mar
  - External TT Eng Drop-2 for applicable COE components *
- Tiger Team outbrief to DISA ~30 Apr
  - Stress Test 22-26 Apr
  - Official TT CM release to DISA

* Eng Drops posted with Readmes